

Listing of the Claims:

1. (Currently Amended) A reaction surface array diagnostic apparatus comprising:

~~at least one~~ a substrate with a plurality of reaction surfaces predeposited in microtiter well spaced bound arrays on the substrate;

~~at least one~~ a plate having a plurality of wells extending therethrough in microtiter well spacing;

a gasket fluidically sealing the plate to the substrate, the gasket having microtiter well spaced wells combining with the wells in the plate to form reaction chambers about the reaction surfaces on the substrate; and

a pair of C-shaped clamps engaging opposed edges of the plate and the substrate, the clamps compressing the gasket between the plate and the substrate.

2. (Cancelled)

3. (Currently Amended) The apparatus of claim 1 further comprising:

at least one open ended aperture formed in the plate; and

a projection extending from at least one of the clamps and releasably engagable with the ~~recess~~ at least one aperture to releasably fix the clamp to the plate.

4. (Currently Amended) The apparatus of claim 1 wherein ~~clamps~~ each clamp of the pair of claims comprises:

two spaced legs extending in the same direction from opposite ends of a central wall.

5. (Currently Amended) The apparatus of claim 4 wherein:
the legs and the central wall define a channel for receiving a stack arrangement of
the substrate, the gasket and the plate.

6. (Currently Amended) The apparatus of claim 4 further comprising:
an array a plurality of side-by-side arranged stacks, each stack individually joined
together by each the pair of C-shaped clamps defined by, the wells in each stack maintaining a
microtiter plate well spacing across the array.

7. (Original) The apparatus of claim 6 further comprising:
a tray having an opening for receiving and supporting the array.

8. (Original) The apparatus of claim 7 further comprising:
a sloped surface formed along one edge of the tray for guiding the array into the
tray.

9. (Original) The apparatus of claim 6 wherein:
two adjacent clamp members of two side-by-side disposed stacks have abutting
central walls.

10. (Original) The apparatus of claim 1 further comprising:
a non-releasable adhesive fixedly joining the gasket to the plate;